



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,643	05/22/2007	Haiyin Ma	DEQ10337P00070US	1000
32116 7590 09/02/2008 WOOD, PHILLIPS, KATZ, CLARK & MORTIMER 500 W. MADISON STREET SUITE 3800 CHICAGO, IL 60661			EXAMINER NGUYEN, PHUNG HOANG JOSEPH	
			ART UNIT 2614	PAPER NUMBER
			MAIL DATE 09/02/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/589,643	MA, HAIYIN	
	Examiner	Art Unit	
	PHUNG-HOANG J. NGUYEN	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 22 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 5-11 and 14 is/are rejected.
- 7) ☒ Claim(s) 3-4, 12-13 and 15-16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Lampola (US Pat 6,668,052).**

As to claim 1, Lampola teaches a method for implementing Wide Area Centrex (WAC) (*see fig. 1, Centrex A of fig. 1a and 1b*), where a corresponding relationship between long number and short number of the WAC users is set and saved (***Centrex database contains all A-subscribers and B-subscribers numbers in long form and short forms, col. 2, lines 9-29; col. 6, lines 8-17***) the method comprising:

routing (***call is routed, col. 2, line 18***) a call a calling user initiates to a soft-switch (***a virtual private network utilized in an IP environment, col. 2, line 50***);

receiving by the soft-switch the call information the calling user initiates and determining that the calling user is a WAC user based on the calling number (***Centrex subscriber group, col. 3, lines 22-45***);

determining a route to the called WAC user based on the call information (information required for implementing the private numbering plan, col. 6, line 26) and completing the call (**fig. 2b, step 28, connect A and B subscribers, col. , lines 54-col. 7, line 14**).

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1-2, 5-9 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Lowmaster (US Pub 2006/0062372).**

As to claim 1, Lowmaster teaches a method for implementing Wide Area Centrex (WAC) (*see fig. 1, label 14 and par. 0005*), where a corresponding relationship between long number and short number of the WAC users is set and saved (***a routing table 114 is built on database 116 with instructions that abbreviated-dial calls in 114 are to be routed... 114 stores/includes data elements 80'' and 82'' for telephone numbers 80 and 82..., pars. 0020-0023***) the method comprising:

routing (***routing calls, par. 0016***) a call a calling user initiates to a soft-switch (***soft switch 126***);

receiving by the soft-switch the call information the calling user initiates and determining that the calling user is a WAC user based on the calling number (**Centrex 14 uses abbreviated dialing routing over VOIP provider's IP 30 to desired destination, par. 0023**);

determining a route to the called WAC user based on the call information and completing the call (**pars. 0020-0023**).

As to claim 2, Lowmaster teaches said calling WAC user is a Next Generation Network (NGN) user (**VOIP server 70 for users. As appreciated by the ordinary skilled artisans that the NGN utilizes the use of Internet Protocol for service**) and said called WAC user is a Public Switched Telephone Network (PSTN) Public Land Mobile Network (PLMN) user (**fig. 1, label 20 for a 5eSS System, and label 60 for a 5eSS system for PRI**);

the step of routing a call (**routing calls, par. 0016**) a calling user initiates to a soft-switch (**soft switch 126**); comprises: the NGN user dialing the short number of the called user, and initiating the call to the soft-switch (**abbreviated dialing server 72 stores data elements 74 and 76 for telephone numbers 80 and 82**);

the step of receiving by the soft-switch the call information the calling user initiates comprises: the soft-switch directly receiving the short number of the called user that the NGN user dials (**fig. 1 indicates soft switch 126 having direct coupling to the 72 where all the short numbers and long numbers of the called party reside**);

the step of determining the route to the called user and completing the call (*pars. 0020-0023*) comprises: the soft-switch (***soft switch 126***) starting its own analysis of Central Exchange (Centrex) numbers (***fig. 1 shows that soft switch 126 controls media gateway 122 implicating by its own technological inherence that 126 does perform the digit analysis***) , obtaining the long number of the called user according to the saved long number and short number corresponding relationship, and routing the call to the Local Switch(LS) (***PBX 10, CO 20 and/or CO60***) to which the called user belongs according to the obtained long number and completing the call (*pars. 0020-0023*).

As to claims 5 and 11, Lowmaster teaches the long number and short number corresponding relationship of the WAC users is saved in a long number and short number corresponding table (***number ranges associated with Centrex groups, PBX and VoIP location added and maintained in the routing table, par. 0018***).

As to claims 6-7, Lowmaster teaches the long number and short number corresponding table is saved in the soft-switch. Furthermore, the corresponding table is also saved in the peripherals of the soft-switch. (***VOIP LAN 22, phones 107 and 108 in the VOIP LAN 22 have the abbreviated number of X0116 and X0178 reflecting the full number 312 555 0116 and 312 555 0178 in the abbreviated dialing server 72***).

As to claims 8-9, Lowmaster teaches the long number and short number corresponding table is saved in a remote database (***fig. 1 shows various class 5***

Art Unit: 2614

central offices 20 and 60 and VOIP server office 70 with soft switch 126. As appreciated by the ordinary skilled artisans, it inherently implies that each of these offices must have its own database which allows access to and from the network remotely or locally); the method further comprising: the soft-switch accessing the remote database directly or via a proxy and the proxy is a local database ***(database 116 of fig., par. 0020).***

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lowmaster (US Pub 2006/0062372) in view of Andruska et al (US Pat 5,574,780).

As to claims 10 and 14, Lowmaster does not teach the switches belonging to the same WAC service group determining the short number prefix and the out-group prefix of the WAC group through negotiation.

Andruska teaches subscriber 24 may dial an access code, such as "*8", followed by the abbreviated digits for the called party. Note that the *8 could be automatically generated or prefixed by the Centrex 26 custom dial plan, and thus does not necessarily have to be dialed by subscriber 24, col. 7, lines 22-26; col. 10, lines 27-32) for the

Art Unit: 2614

purpose of providing the translation table where each row contains a MGBID group number, a prefix or access code (e.g. "8" in abbreviated number 8-1234), and an area code (e.g. 214) and office code (e.g. 568) corresponding to the prefix code.

Therefore it would have been obvious to the ordinary skilled artisans at the time of the invention was made to incorporate the teaching of Andruska into the teaching of Lowmaster to inform the public that a public routing number can be derived based on the record corresponding to the MGBID group number and access code.

Allowable Subject Matter

Claims 3 and 4 are objected to as being dependent upon the rejected base claim 1, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

4. Claims 12 and 15, and 13 and 16 are objected to because they depend on objected claims 3 and 4 respectively.

INQUIRY

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUNG-HOANG J. NGUYEN whose telephone number is (571)270-1949. The examiner can normally be reached on Monday to Thursday, 8:30AM - 5:00PM EST.

Art Unit: 2614

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 571 272 7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

August 27, 2008

/Phung-Hoang J Nguyen/
Examiner, Art Unit 2614

/CURTIS KUNTZ/

Supervisory Patent Examiner, Art Unit 2614